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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,733	10/30/2003	Jignesh Shah	15436.250.28.1	7719

22913 7590 03/30/2007

WORKMAN NYDEGGER
(F/K/A WORKMAN NYDEGGER & SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER

PAK, SUNG H

ART UNIT	PAPER NUMBER
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2874

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/697,733

Applicant(s)

SHAH ET AL.

Examiner

Sung H. Pak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-13 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13 and 15-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Applicants' response filed 7/18/2006 has been carefully reviewed by the examiner. In view of the response, finality of the previous office action has been withdrawn, and all pending claims have been reconsidered by the examiner.

Claim Objections

Claims 15-20 are objected to because of the following informalities: claims 15-20 depend directly, or indirectly from a cancelled claim 14. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 21 is rejected under 35 U.S.C. 102(a) as being anticipated by Andrews et al (US 6,464,402 B1).

Andrews reference discloses an optical connecting device comprising a base member having a hollow core (the portion inside element '63' in Fig. 11 is hollow) extending from a first end to a second end; a recess (portion labeled '64' in Fig. 11) defining a first outer perimeter and a second outer perimeter (the second outer perimeter is immediately adjacent to the surface of '64', and the first outer perimeter is connected to the second outer perimeter via a stepped-edge as shown in Fig. 11), the first outer perimeter being larger than the second outer perimeter (Fig.

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11), the recess being configured to receive a LC, ST, SC or FC connector (column 2, lines 42-48), the first outer perimeter being larger than an outer perimeter of the LC, ST, SC, or FC connector, the second outer perimeter being smaller than the outer perimeter of LC, ST, SC, or FC connector such that the second outer perimeter receives the LC, ST, SC, or FC connector is a friction-fit engagement (Fig. 13; column 7, line 40-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogstadius et al (US 4,666,243).

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Rogstadius reference discloses an optical connection apparatus comprising: a base member for a ferrule-type optical connector, said base member having a first hollow bore (bore inside element '7' in Fig. 2) extending from a first end toward a second end; and a recess coaxially aligned with said first hollow bore (recess formed between elements '5' and '10' in Fig. 2), said recess having a first internal perimeter (portion of '10' near element '5'), and a second internal perimeter (portion of '10' farthest from element '5'), wherein said first perimeter is smaller than said second perimeter (Fig. 2); wherein said recess is configured to receive a ferrule ('13' Fig. 2);

wherein a post extends from a bottom of said recess (post being a portion of element '5' near the element '7' as shown in Fig. 2);

wherein said first hollow bore passes through said post and terminates at an end of said post (bore inside element '7' in Fig. 2);

wherein a post extends from a bottom of said recess, said post having an end that terminates substantially in alignment with at least a portion of a termination region (portion of '5' near element '7' in Fig. 2);

wherein a termination region is disposed between said first internal perimeter and said second internal perimeter (that is, between the first internal perimeter located near the recess and the second internal perimeter located at the right-most edge of element '10' in Fig. 2);

wherein said second internal perimeter is sized to form a gap between a ferrule disposed in said recess and said second internal perimeter (Fig. 2).

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On the other hand, Rogstadius reference does not explicitly state that the ferrule element is received in the recess portion in a friction-fit engagement. Instead, Rogstadius reference explicitly teaches that the ferrule element is secured in the recess portion via the screw element "7" in Fig. 2. However, the use of a friction-fit engagement in optical fiber connector arrangement is common and well known in the art. Such friction-fit engagements are well known to be advantageous and desirable in the art because they allow for quick and precise alignment of fiber optic components that are easy to disengage and quickly re-connect. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Rogstadius to have friction-fit engagement of ferrule into the recess shown in Fig. 2.

Regarding claim 9, Rogstadius reference does not explicitly teach the use of LC, ST, SC, or FC connector. However, the use of LC, ST, SC, or FC connector is well known and common in the art. Such connector types are well known in the art to provide standard fitting/ sizes for fiber optic termination. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Rogstadius to use LC, ST, SC, or FC connector, because it would allow the device of Rogstadius to be compatible with widely accepted and used fiber optic connector types in the art.

Claims 10-13, 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogstadius et al (US 4,666,243) in view of Andrews et al (US 6,464,402 B1).

Rogstadius reference discloses fiber optic connection arrangement as discussed above. However, Rogstadius reference does not explicitly teach that a sidewall extending from the bottom of the recess has a first perimeter, and has a height less than or equal to the height of the post member as claimed in the instant application.

On the other hand, Andrews reference discloses all the claimed features recited in the above mentioned claims, that are not explicitly disclosed by the Rogstadius reference. Particularly, Andrews reference discloses a portion of the sidewall having a first perimeter, and having a height that is less than the height of the post member (Fig. 11- see also the discussion above). Such configuration is considered advantageous and desirable in the mechanical coupler art, because it obviates the need for absolute connector alignment before commencing the insertion movement. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Rogstadius to have the sidewall with the height less than or equal to the post member as taught by Andrews reference.

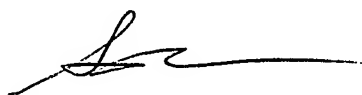
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sung H. Pak
Primary Patent Examiner
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